

## REMARKS

Reconsideration is respectfully requested.

By the above amendments, Claim 1 has been amended to provide an additional disclosure of the elements. The objected to term is now recited as being "... designed and configured for taking samples by means of a micro-dispenser." Applicants further respectfully consider that the objection is not firmly grounded in patent procedure, and specifically cite to the MPEP § 2173.05(g) - Functional Limitations, a copy of which is attached hereto for easy reference. As understood, a functional limitation or term defining an invention "does not, in and of itself, render a claim improper," so long as the limitation or term sets "definite boundaries on the patent protection sought." It is the Applicants' position that the term sets forth definite boundaries in that the claims are limited to devices having a configuration for taking samples by means of a micro-dispenser, thus meeting the requirement of setting "definite boundaries on the patent protection sought."

With respect to the objection of Claims 8 and 9, these claims have been amended to recite a method in part comprising the steps of "providing the electrophoresis device of Claim 1," as is requested in the Office Action. These amendments are respectfully considered to have overcome the objections to the claim format.

With respect to the rejection under 35 U.S.C. § 102(e) over Sundberg et al., it is initially noted that U.S. Patent No. 6,086,825 issued from an application that was not filed "in the United States before the invention thereof by the Applicant for patent" as is required by 35 U.S.C. § 102(e). That is, the filing date of the Sundberg et al. application in the U.S. Patent Office is indicated as being March 23, 1999, which is after the priority date of Applicants' priority German application (June 10, 1998). Thus, the reference itself fails to qualify as prior art under 35 U.S.C. § 102(e) or any other basis for the rejection. On this ground, Applicants respectfully request the withdrawal of

the rejection of Claims 1 and 5-8 and also of Claims 1-9, which also relies on Sundberg et al. in the obviousness rejection under 35 U.S.C. § 103.

However, in view of the divisional status of the Sundberg et al. reference, and in order to further advance prosecution of this application, Applicants further respond to the prior art rejections with the following arguments for patentability.

At least the following limitations are not described or shown by Sundberg et al.:

- 1) The separation channels 78 of Sundberg et al. (Fig. 7) cannot be loaded separately with samples, see, for example, column 9, lines 43-60.
- 2) There are no application areas provided at the crossing points of the separation channel 78 and the injection channels 76, 88.
- 3) The injection channels 76, 88 do not intersect the separation channels 78. Instead, the separation channels 78 intersect the injection channels 76, 88, which is a different configuration.

Referring now to Guzman (U.S. Patent No. 6,406,604,) the Office Action correctly states that Guzman does not qualify as prior art. Nevertheless, and for the sake of completeness, remarks thereto are also included herein. The following differences relate to recited limitations that are not described or shown.

- 1) The separation of channels 28, 30, and 32 in Fig. 1 cannot be loaded separately since the injection channel 24 intersects the separation channels 28, 30, 32 without being provided with application areas at the crossing points.
- 2) The injection channel 24 in Fig. 1 of Guzman is not loaded using an electrical field.
- 3) There are no application areas provided at the crossing points of the injection channel 24 and the separation channels 28, 30, and 32 in Fig. 1.

With regard to Parce (U.S. Patent No. 5,958,203) the following claim limitations are not shown or described therein.

1) Parce merely teaches to provide a single separation channel, whereas the claimed subject matter comprises a plurality of separation channels. This difference is important since it is an object of the invention to provide an improved electrophoresis device with an increased number of separation channels (see page 4, paragraph 2 of the specification).

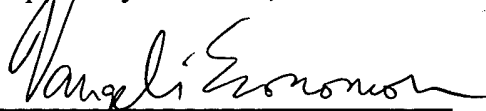
2) There is no application area provided at the crossing point of the separation channel and the injection channel.

With regard to the objection raised in section 5 of the Office Action the above amended new set of claims responds to the objections of both Claim 1 and Claims 8 and 9.

The amendment of Claim 7 is considered to be responsive to the objection that Claim 7 is only an "intended use." It is respectfully submitted that as amended, Claim 7 contains sufficient structural limitations to provide the basis of a proper dependent claim, so as to overcome the rejection.

For the above reasons, it is considered that the claims, as amended, find support in the application specification as filed, and that the combination of elements recited in the pending claims, as amended, distinguish over the references of record. Accordingly, reconsideration and withdrawal of the outstanding rejections are respectfully requested an indication of allowable subject matter is earnestly solicited.

Respectfully submitted,



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# 2173.05(g) Functional Limitations - 2100 Patentability

## 2173.05(g) Functional Limitations

A functional limitation is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971).

A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step. Whether or not the functional limitation complies with **35 U.S.C. 112**, second paragraph is a different issue from whether the limitation is properly supported under **35 U.S.C. 112**, first paragraph or is distinguished over the prior art. A few examples are set forth below to illustrate situations where the issue of whether a functional limitation complies with **35 U.S.C. 112**, second paragraph was considered.

It was held that the limitation used to define a radical on a chemical compound as "incapable of forming a dye with said oxidizing developing agent" although functional, was perfectly acceptable because it set definite boundaries on the patent protection sought. *In re Barr*, 444 F.2d 588, 170 USPQ 33 (CCPA 1971).

In a claim that was directed to a kit of component parts capable of being assembled, the Court held that limitations such as "members adapted to be positioned" and "portions . . . being resiliently dilatable whereby said housing may be slidably positioned" serve to precisely define present structural attributes of interrelated component parts of the claimed assembly. *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976).

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